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May 17, 2002



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. on

Shaylor E. Dunn

Date of Signature: 5/17/02

Commissioner for Patents Washington, D.C. 20231

Re:

U.S. Patent Application Serial No. 10/088,988 for METHOD AND DEVICE FOR PROCESSING CONDITIONAL JUMP INSTRUCTIONS IN A PROCESSOR WITH PIPELINED ARCHITECTURE

Our File No. 1406/52

Sir:

Please find enclosed in connection with the subject U.S. patent application the following documents:

- 1. An Information Disclosure Statement (2 pages);
- 2. Forms PTO/SB/08A and PTO/SB/08B (in duplicate);
- 3. Copies of cited references (10 references); and
- 4. A return-receipt postcard to be returned to us with the U.S. Patent and Trademark Office filing stamp thereon.

Commissioner for Patents Page 2 May 17, 2002

Although no fee is believed to be due, he Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. <u>50-0426</u>.

Respectfully submitted,

JENKINS & WILSON, P.A.

Richard E. Jenkins Registration No. 28,428

Customer No. Bar Code Label:

25297

PATENT TRADEMARK OFFICE

REJ/sed

Enclosures

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PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Xiaoning Nie

Group Art Unit: Not Assigned

Serial No.: 10/088,988

Examiner: Not Assigned

Filed: March 25, 2002

Docket No.: 1406/52

For: METHOD AND DEVICE FOR PROCESSING CONDITIONAL: JUMP INSTRUCTIONS IN A PROCESSOR WITH PIPELINED ARCHITECTURE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. 1.56, 1.97, and 1.98, applicants' undersigned attorney brings to the attention of the Patent and Trademark Office the following references. Copies of the references as well as Forms PTO/SB/08A and PTO/SB/08B are attached hereto. This is not to be construed as a representation that a search has been made or that a reference is relevant merely because cited.

- U.S. Patent No. 5,928,358 to <u>Takayama et al.</u> discloses an information processing apparatus which accurately predicts whether a branch is taken for a conditional branch instruction, using small-scale hardware.
- U.S. Patent No. 5,349,671 to <u>Maeda et al.</u> discloses a microprocessor system generating instruction fetch addresses at high speed.
- U.S. Patent No. 5,136,697 to <u>Johnson</u> discloses a system for reducing delay for execution subsequent to correctly predicted branch instruction using fetch information stored with each block of instructions in cache.

French Patent No. 2 770 662 to <u>Eric Bouyoux</u> discloses a microprocesseur pipeline a saut conditionnel en un cycle d'horloge.

German Patent No. DE 38 55 629 T2 to <u>Usami et al.</u> discloses a verzweigungsschaltung für einen Pipeline-Prozessor.

Appln. No.: 10/088,988

Publication by Mahlke et al. entitled "A Comparison of Full and Partial Predicated Execution Support for ILP Processors", Center for Reliable and High-Performance Computing, pp. 138-149 (June 22, 1995).

Publication by <u>Lee et al.</u> entitled "Pathlength Reduction Features in the PA-RISC Architecture", <u>IEEE</u>, pp. 129-135 (February 24, 1992).

Publication by Mahon et al. entitled "Hewlett-Packard Precision Architecture: The Processor", Hewlett-Packard Journal, pp. 4-21 (August 1986).

Publication by <u>Parker et al.</u> entitled "Control Structure for Making Fast Conditional Branch Decisions", <u>IBM Technical Disclosure Bulletin</u>, Vol. 27, No. 2, pp. 1239-1240 (July 1984).

Publication by <u>Chevillat et al.</u> entitled "Single-Cycle Branch Operations for a High-Speed Microprocessor", <u>IBM Technical Disclosure Bulletin</u>, Vol. 24, No. 4, p. 1951 (September 1981).

Early passage of the subject application to issue is earnestly solicited.

Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account Number $\underline{50-0426}$.

Respectfully submitted,

JENKINS & WILSON, P.A.

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PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

Complete if Known					
Application Number	10/088.988				
Filing Date	03/25/2002				
First Named Inventor	Xiaoning Nie				
Art Unit	Not Assigned				
Examiner Name	Not Assigned				
Attorney Docket Number	1406/52				

U.S. PATENT DOCUMENTS					
Examiner Initials*		Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A 1	US-5,928,358	07/27/1999	Takayama et al.	
	A2	US-5,349,671		Maeda et al.	
	A3	US- 5,136,697	08/04/1992	Johnson	
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	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (#known)		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶				
	A4	2 770 662	05/07/1999	Eric Bouyoux						
-	A5	DE 38 55 629 · T2	03/27/1997	Usami et al.						
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO				Complete if Known		
INICOE	DRAATION F	NIC	CLOCUPE	Application Number	10/088.988	
INFOR	KIVIATION L	JIO	CLOSURE	Filing Date	03/25/2002	
STATEMENT BY APPLICANT			PPI ICANT	First Named Inventor	Xiaoning Nie	
				Group Art Unit	Not Assigned	
(use as many sheets as necessary)			s necessary)	Examiner Name	Not Assigned	
Sheet	1	of	1	Attorney Docket Number	1406/52	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²			
	B1	MAHLKE ET AL., "A Comparison of Full and Partial Predicated Execution Support for ILP Processors," Center for Reliable and High-Performance Computing, p. 138-149, (June 22, 1995).	X			
	B2	LEE ET AL., "Pathlength Reduction Features in the PA-RISC Architecture," IEEE, p. 129-135, (February 24, 1992).	X			
	B3	MAHON ET AL., "Hewlett-Packard Precision Architecture: The Processor," Hewlett-Packard Journal, p. 4-21, (August 1986).				
	B4	PARKER ET AL., "Control Structure for Making Fast Conditional Branch Decisions," IBM Technical Disclosure Bulletin, p. 1239-1240, (July 1984).	X			
	B5	CHEVILLAT ET AL., "Single-Cycle Branch Operations for a High-Speed Microprocessor," IBM Technical Disclosure Bulletin, Vol. 24 (No. 4), p. 1951, (September 1981).	X			
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.